US006460020B1

(12) **United States Patent**
Pool et al.

(10) **Patent No.: US 6,460,020 B1**
(45) **Date of Patent: Oct. 1, 2002**

(54) **UNIVERSAL SHOPPING CENTER FOR INTERNATIONAL OPERATION**

(75) Inventors: **Ed Pool**, Union Hall; **Doug Mauer**, Blacksburg, both of VA (US)

(73) Assignee: **DE Technologies, Inc.**, Union Hall, VA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **08/999,297**

(22) Filed: **Dec. 29, 1997**

Related U.S. Application Data

(60) Provisional application No. 60/033,984, filed on Dec. 30, 1996.

(51) **Int. Cl.**[7] **G06F 17/60**

(52) **U.S. Cl.** **705/26**; 705/17

(58) **Field of Search** 705/26, 27, 16, 705/17; 707/102, 103, 104, 9, 533; 345/335; 709/217; 348/7, 12; 455/5.1

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,799,156 A		1/1989	Shavit et al.	705/26
5,630,125 A	*	5/1997	Zellweger	707/103
5,710,887 A	*	1/1998	Chelliah et al.	705/26
5,717,989 A		2/1998	Tozzoli et al.	705/37
5,799,283 A		8/1998	Francisco et al.	705/19
5,850,446 A		12/1998	Berger et al.	705/79
5,875,433 A		2/1999	Francisco et al.	705/26
5,889,863 A	*	3/1999	Weber	380/25
5,892,900 A		4/1999	Ginter et al.	713/200
5,897,621 A	*	4/1999	Boesch et al.	705/26
5,910,987 A		6/1999	Ginter et al.	705/52
5,987,429 A		11/1999	Maritzen et al.	705/31

FOREIGN PATENT DOCUMENTS

WO	WO 96 08783 A	3/1996	
WO	WO 97 31322 A	8/1997	

OTHER PUBLICATIONS

E. Schell, *Business 400: Not Just for Catalogs*, Catalog Age, Mar. 1991, pp. 147–148.*

T. Middleton, Global Migration: *A Midwest Manufacturer Seeks a Single Worldwide Accounting System to Begins its Conversion to Client–Server Architecture*, Corporate Computing, vol. 2, No. 4, Apr. 1993, pp. 112–122.*

M. Cohn, *What's new with old apps?*, Accounting Technology, vol. 11, No. 5, Jun. 1995, pp. 66–81.*

Business and Financial Applications, 1996 Database Buyer's Guide and Client/Server Sourcebook, DBMS, vol. 9, No. 6, Jun. 1996, pp. 10–15.

C. Lovelock et al., *Developing Global Strategies for Service Businesses*, California Management Review, vol. 38, No. 2, Winter 1996, pp. 64–86.

"Business 400: Not Just for Catalogs"–Schell Ernest–Mar. 1991–Catalog Age–(pp. 147–148).*

"What Benefits will Global EDI Offer?"–Cahn, David–Jun., 1992–Transmission & Distribution.*

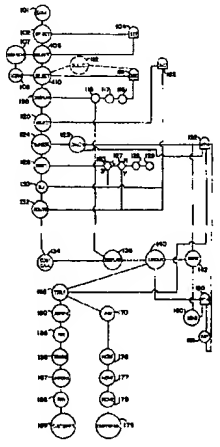
"Global Electronic Commerce Though Localization and Multilingualism" Global Standards Conference. Building the Global Information Society for the 21st Century, Brussels, Belgium, Oct. 1–3, 1997, vol. 20, No. 2–3, pp. 101–109, XP00867692 Computer Standards & Interfaces, Dec. 15, 1998, Elsevier, Netherlands ISSN : 0920–5489; pp. 104–109.

(List continued on next page.)

(57) **ABSTRACT**

Primary Examiner—Kevin J. Teska
Assistant Examiner—Russell W. Frejd An international transaction system for operation over the internet/intranet provides a pre-transactional calculation of all charges involved in any international transaction. Upon the option of the customer, the goods can be viewed on catalogue sheets translated to a language of the customer's choice, and the price provided in a currency selected by the customer. The customer also has the option of initiating the order with automatic credit authorization, generation of an electronic title or commercial invoice and arrangements and payment of shipping charges and any taxes and import/export duties.

17 Claims, 2 Drawing Sheets



US-PAT-NO: 6460020

DOCUMENT-IDENTIFIER: US 6460020 B1

TITLE: Universal shopping center for international operation

---------- KWIC ---------

Detailed Description Text - DETX (16):

Thus, the customer is given the option of determining the real price of the transaction. If the customer makes this request (step 120), the next stage of the inventive process is carried out. Responsive to an affirmative answer by the customer, a **commodity code** for the selected product is obtained (step 122) by accessing the third database and processing center, containing look-up tables of the harmonized international tariff tables and classification system, as well as the formats for any necessary import/export data, and administrative requirements for all countries involved in possible transactions. If the vendor's country of origin or the destination country have **commodity codes** different from those of the harmonized tables, a search is conducted in other databases by the third database and processing center to determine the correct **commodity code**. This will be used to look up other data related to the product and the country of destination, as well as generate appropriate documents from the third database. The **commodity code** can be displayed to the customer for his or her information. However, this is not necessary. Rather, the **commodity code** in conjunction with the country of destination is used to trigger certain subsequent operations of the inventive transaction process as depicted in FIG. 1.

Detailed Description Text - DETX (18):

At step 126, the customer inputs the destination for purposes of calculating the cost of delivering the selected product or products to that destination. This information, in conjunction with the **commodity code** triggers the particular calculations for packaging, shipping, taxes, duties, insurance etc. of the rest of the transaction process. This is necessary to select the correct freight routes and charge. If, for example, the destination point is within the vendor's country of origin (a determination made at step 126), the calculation of transport charges and duties is much simplified. Calculation of standard freight charges is provided, along with the optional insurance and any other charges, to the customer at step 127. This information can be displayed

on the screen as soon as the customer indicates the destination point due to the simplicity of the calculations.

Detailed Description Text - DETX (20):

For international transactions (to which the present invention is specifically directed) and situations in which a customer can select some freight options, the calculation of freight charges is for more complex. First, (at step 130), revenue units are calculated for the products to be shipped in four different ways, including: metric units for air transport; metic units for sea transport; standard English units for air transports; and, standard English units for sea transport. The precise calculations of each type of revenue unit are found is Appendix II. These calculations are standard in the shipping industry, and based upon information derived from the third data base, including packing requirements based upon the characteristics of the selected product or products. The type of revenue unit selected by a vendor, customer or the instant transaction program depends upon a variety of factors, including: the country of origin of the vendor; the country of origin of the shipper; the type of product involved (**commodity code**); and, (most important) the least expensive method of transporting the goods at issue.

Detailed Description Text - DETX (21):

At step 132 a determination of the discrete legs or links of the overall transport route are determined based upon shipping data contained in the fifth data base and processing center. This is also done based upon a standard shipping route dictated by the vendor, the route requested by the customer, or some combination of the two. The transport route is further based on type of product indicated or the **commodity code** provided by the third data base, which also provides the shipping and administrative requirements of a specific product. In many cases, the various discrete legs of the route are dictated by the nature of the product being shipped. For example, an automobile being shipped from Germany to the United States will be transported by sea, and embarked on ship at the port in Germany most convenient to the automobile manufacturer. The manufacturer will most likely dictate that the sea transport take place from the German port of his choice to New York city. At which point, the customer has options of how the car will be taken from the warf, through U.S. Customs, and to the final destination. Thus, between the vendor and the customer each discrete leg of the transport route is determined (step 132), as well as the costs accompanying each of those discrete legs of the journey (step 134).

Detailed Description Text - DETX (32):

Along with the physical packing, handling and shipping of the goods, it is necessary to carry out the administrative functions. The present inventive system handles these (step 185) by sending electronic requests to the necessary
governmental agencies based upon the **commodity code** from the harmonized and the
country of destination. This combination will trigger a series of operations (out of a large number of possible operations) to satisfy the administrative requirements for carrying out the transaction, including the generation of all necessary documents based on data from the third database.

Detailed Description Text - DETX (33):

For example, the combination of destination and **commodity code** may automatically trigger a request to the Department of Commerce (DOC) for an export license. This can be done electronically since the DOC, like most government entities, is capable of receiving communications via e-mail and responding thereto. The electronic title can be sent as part of the request for the export license, and the response from the state department returned electronically. The electronic documentation from the DOC can then be used to make a request to the State Department to obtain clearance to export the subject goods, if the **commodity code** and destination country justify that such a request be made. The electronic indication of an export license from the Department of Commerce and the electronic clearance document from the State Department can be sent electronically to the U.S. Customs service along with the electronic title to obtain prompt clearance that will allow the goods to be transferred quickly from the local carrier to an international carrier such as a plane or ship.

Detailed Description Text - DETX (46):

The example will also demonstrate one of the prime differences between a domestic transaction concluded in the United States of America and the IET or IIT. This fundamental difference is that a domestic transaction is a price driven transaction while the IET and IIT are commodity "type" driven transactions. American governmental taxation schedules are based upon FOB point prices. In virtually all domestic transactions freight and insurance are not considered taxable components of the goods or services, this is not the case however in the IET or IIT transactions. The rates for carriage, insurance, handling, import duties, Value Added Taxes (VAT) and luxury taxes are based upon the commodity description itself via Harmonized Tariff Schedules
or import country specific schedules which allow for **taxes and fees to be assessed** against total cost figures and are varied by the commodity definition.

The compounding effect of these procedures means that **taxes will be assessed upon taxes** as well as any intermediary fees and costs including freight, handling, insurance or export country specific fees and taxes. International carriage fees are also based upon the commodity and then formulated to the weight or dimensional characteristics of the shipment, which ever will produce the greatest revenue for carriage operator. For the preceding reason this factor is called the revenue ton and is computated on cargo cubic footage versus shipper ton across the Atlantic and cubic meters versus the metric ton across the Pacific. The revenue computation is different for air shipments and is based on the "dimensional factor" and is calculated by L.times.W.times.H/166 versus the weight in pounds which ever produces the greatest revenue for the carrier.